Draft
Environmental Assessment

Lewis Property, Sun River Acquisition

April 15, 2005

Montana Fish, Wildlife & Parks

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Draft Environmental Assessment
MEPA, NEPA, MCA 23-1-110 CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of Proposed Action:

Development	_____
Renovation	_____
Maintenance	_____
Land Acquisition	X
Equipment Acquisition	_____
Other (Describe)	_____

2. Agency authority for the proposed action: The 1977 Montana Legislature enacted statute 87-1-605 MCA, which directs Fish, Wildlife & Parks to acquire, develop and operate a system of fishing accesses. The legislature established a funding account to ensure that this function would be accomplished. Sections 12-8-213, 23-1-105, 23-1-106, 15-1-122, 61-3-321, and 87-1-303, MCA, authorize the collection fees and charges for the use of state park system units and fishing access sites, and contain rule-making authority for their use, occupancy and protection.

Section 23-1-110 MCA, or House Bill 495, and the guidelines established in 12.8.604 (ARM) (1) relate to changes in state park and fishing access site features or use patterns. The proposed acquisition will not change site features or historical use; therefore, Section 23-1-110 MCA is not initiated by the proposed fishing access site acquisition. See **APPENDIX 1**.

2. Name of Project
Lewis Property, Sun River Acquisition

3. Name, Address and Phone Number of Project Sponsor

Allan Kuser
Fishing Access Site Coordinator
Montana Fish, Wildlife & Parks, HQ
PO Box 200701
Helena, MT 59620
406-444-7885

Steve Leathe
Regional Fisheries Manager
Montana Fish, Wildlife & Parks, Region 4
4600 Giant Springs Road
Great Falls, MT 59405
406-454-5855

4. If Applicable:

Estimated Construction/Commencement Date:	NA
Estimated Completion Date:	NA
Current Status of Project Design (% complete):	NA

5. Location Affected by Proposed Action (county, range and township)
The Lewis Property is located in sections 29 and 32, Township 21 North, Range 1 East, Cascade County, Montana. The proposed acquisition is 134.07 acres.

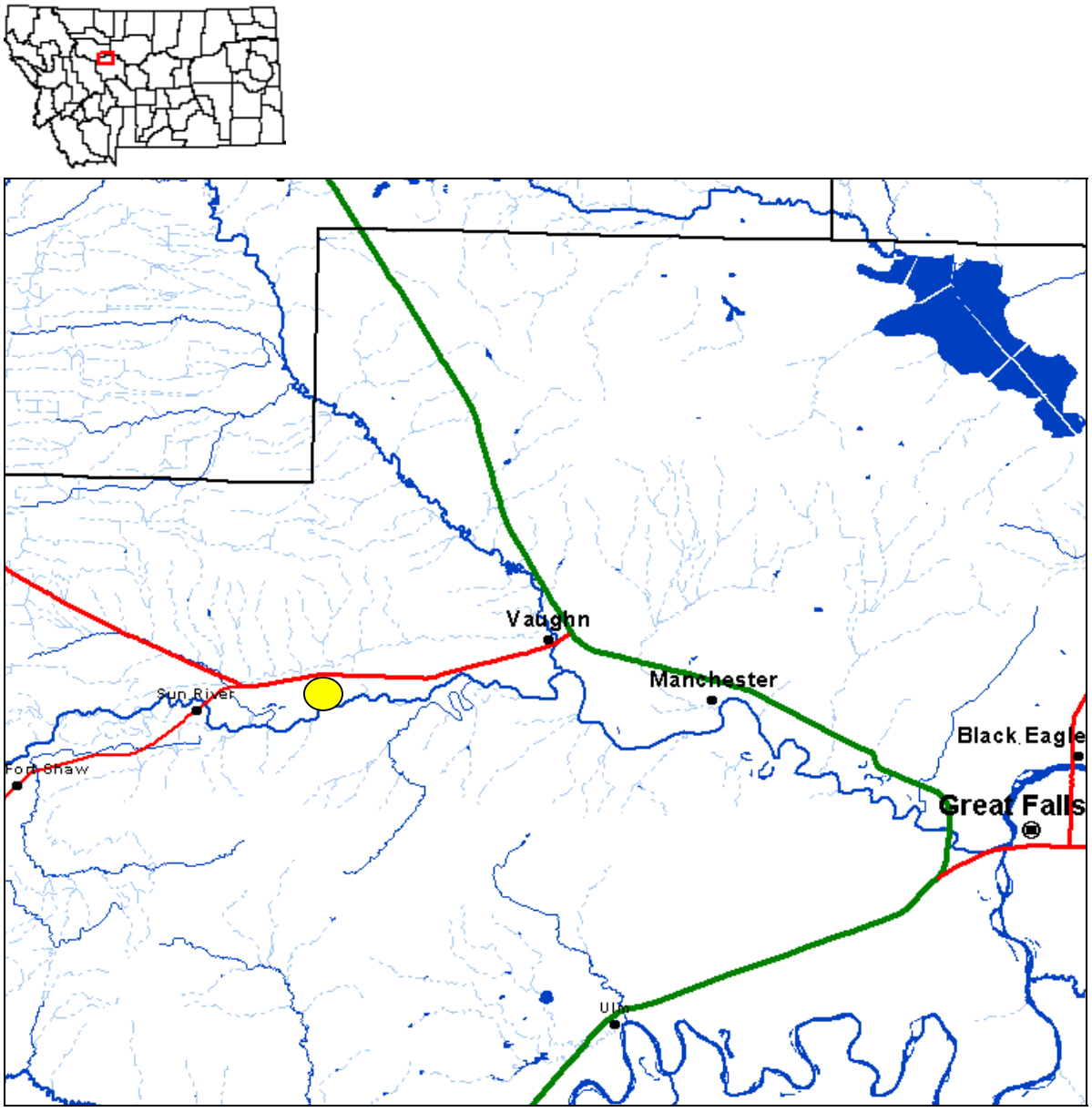


Figure 1: Yellow circle delineates location of Lewis Property.

6. Project Size: Estimate the number of acres that would be directly affected that are currently:

(a) Developed:
Residential..... 0 acres
Industrial..... 0 acres

(b) Open Space/Woodlands/
Recreation..... 50 acres

(c) Wetlands/Riparian
Areas..... 40 acres

(d) Floodplain..... 80 acres

(e) Productive:
irrigated cropland..... 0 acres
dry cropland..... 0 acres
forestry..... 0 acres
rangeland..... 0 acres
other..... 0 acres

7. Map/site plan: attach an original 8 1/2" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.

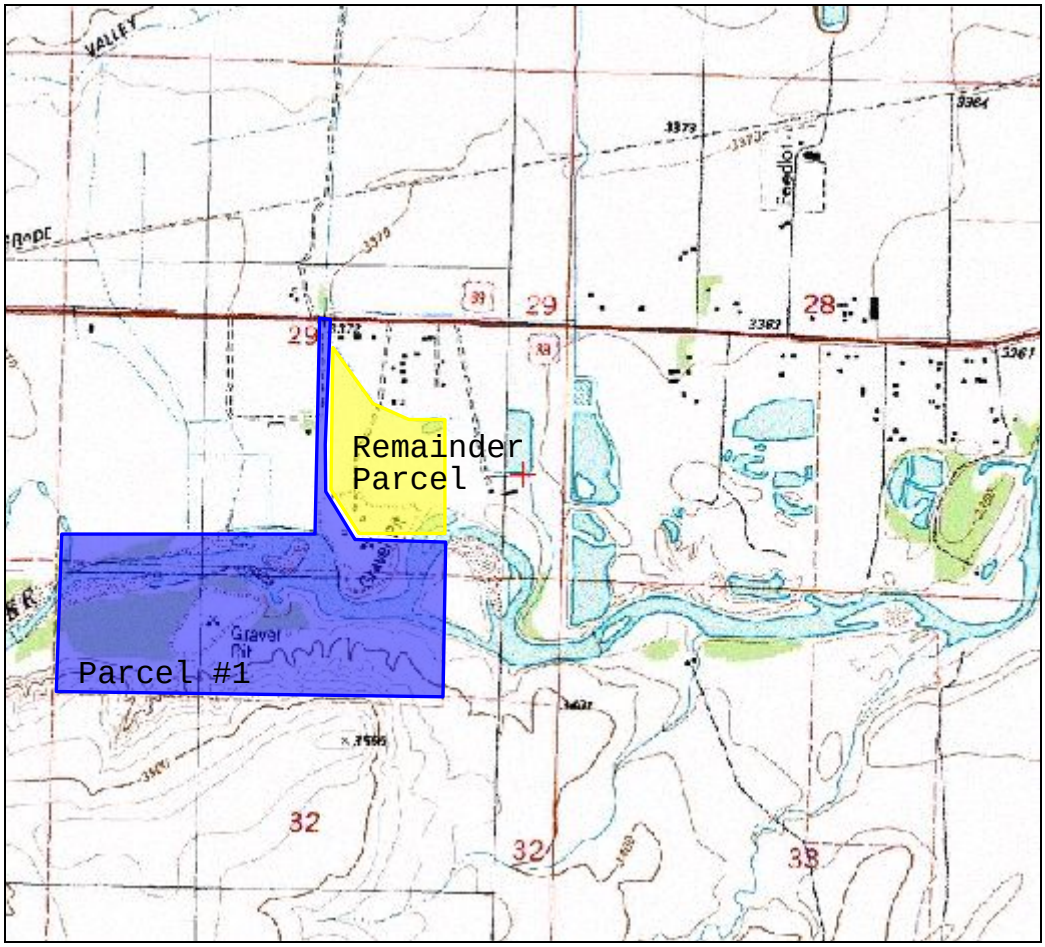


Figure 2: Topographic map depicting approximate boundaries (blue polygon; 134.07 acres) of MFWP proposed acquisition of the Lewis Property (Parcel #1; will be referred to as proposed Fishing Access Site; Base photo source: Montana Natural Resources Information Service Topofinder II). Yellow polygon is the Remainder Parcel (45.03 acres) of the Lewis Property that will not be purchased by MFWP.

Figure 3: Lewis Property aerial photograph depicting approximate boundaries (blue polygon; 134.07acres) of proposed Fishing Access Site (FAS; Base photo source: Montana Natural Resources Information Service Topofinder II). Yellow polygon is the Remainder Parcel (45.03 acres) of the Lewis Property that will not be purchased by MFWP.

8. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.

(a) Permits:

Agency Name	Permit	Date Filed/#
Cascade County Planning:	Board must permit a house on the Remainder Parcel	

(b) Funding:

Agency Name	Funding Amount
Montana Fish Wildlife & Parks Fishing Access Acquisition Fund	$150,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility
Cascade County Commissioner	Must approve the Certificate of Survey
Cascade County Planning:	Must approve the division of land
Department of Health and Environmental Sciences	Must approve the subdivision
Department of Health and Environmental Sciences	Must approve future development.
Department of Environmental Quality	Must delist this property from the CECRA list of contaminated properties.

9. Narrative summary of the proposed action or project including the benefits and purpose of the proposed action.

Lewis Property and Proposed FAS Description

The Lewis Property is located approximately 4 miles west of Vaughn on Hwy 200, or 14 miles northwest of Great Falls. The proposed FAS is approximately 134 acres and has been disturbed by gravel mining. The Sun River flows through the Lewis Property. There is a variety of vegetation and wildlife at the proposed FAS due to the various habitats. There are stands of mature cottonwoods, willows along the river banks, and numerous grasses and shrubs throughout the proposed FAS. Pheasant, Hungarian partridge, white-tailed deer, antelope, and waterfowl have all been noted at the proposed FAS.

On the north side of the Sun River there is a gravel pit, there are mature cottonwood stands, there is an osprey nest, and there are several two-track roads (including the access road, of which half is paved and half is gravel). Spotted knapweed is present. In addition, there is a high infestation of leafy spurge. The real estate broker has released insects to control leafy spurge on the Lewis property for the past two years. MFWP minimized the amount of area purchased on the north side to minimize the weed infestation problem on the proposed FAS.

Photo 1: Access road to Lewis Property. Photo taken looking south from Hwy 200.

Photo 2: Foreground: cottonwood stand on north-side of Sun River; background: upland area on south-side of Sun River. Photo taken looking south from entrance road.

Photo 3: Foreground: Sun River; background: cottonwood stands near pond. Photo taken looking southwest from north shore of Sun River.

Photo 4: Sun River. Photo taken looking east from north shore of Sun River.

Most of the proposed FAS is located south of the Sun River. This side of the river is mostly upland grasslands; however, there is a pond, there are some wetland areas, and there are mature cottonwood stands. Access to the south side of the Sun River is by boat or by wading across the river. Leafy spurge and spotted knapweed occur on the south side of the river; however, the infestation is minor. The grassland has saline habitats with greasewood and rabbit brush present. In addition, blue bunch grass is present, indicating the site has not been grazed recently. The pond is heavily used by waterfowl, and there are nesting mounds present. Although there are signs of furbearers, none have been identified. There has been no assessment of fish in the pond; however, it has the potential to be developed as a fishery.

Photo 5: Upland area on south side of Sun River. Photo taken looking east.

Photos 6 and 7: Pond and associated wetlands located on south side of Sun River. Photo taken looking north.

Photo 8: Upland area on south side of Sun River. Photo taken looking north.

There has been some degradation of the proposed FAS. Gravel mining activities have left areas denuded and gravel mounds remain on the north side of the river. Car bodies have been deposited along the riverbank. Garbage is prevalent throughout the site. There are several two tracks on the north side of the river, ATV tracks crossing the river, and ATV trails on the south side of the river. The south side fence is in need of repair.

Proposed Action, Purpose and Benefits of the Action

Montana Fish, Wildlife & Parks (MFWP) proposes to purchase a portion of the Lewis Property using funds from the Fishing Access Acquisition Fund, for the purpose of providing a FAS on the Sun River.

The Sun River is a floatable stream, but access is poor in several areas. There is no public access between the towns of Sun River and Great Falls (30 river miles). The long-term goal of MFWP on the Sun River is to improve the fishery and recreational opportunities by improving river flows. Trout populations are depressed in the entire 100 miles of the Sun River from Gibson Dam to Great Falls due to heavy irrigation use. However, fishing and floating opportunities can be good in certain areas at certain times of the year. The lower 17 miles of the Sun River is heavily degraded by excessive sediment input from Muddy Creek. Muddy Creek enters the Sun River near the town of Vaughn. The potential site would be located upstream of the Muddy Creek confluence where the Sun River is less degraded.

The addition of river acreage on the Sun River would be a prime location for hunters, anglers, and recreationists throughout the year. The proposed FAS could be used as a takeout for anglers, hunters, and floaters who launch their craft at Medicine River FAS in the town of Sun River, located six miles upstream from this proposed FAS. In addition, the pond could be used by waterfowl hunters, and has a potential to be a high quality fishery. The Lewis Property was previously used as a storage facility for chemicals and as a gravel mine for a construction company. The proposed FAS is not located where past chemical storage occurred. Contamination issues will be discussed in Recent Contamination History of the Lewis Property Section. Finally, the acreage that MFWP proposes to acquire will minimize the weed infestation problems at the site. Acquisition of the property by MFWP would enhance the site by increasing public access, controlling weed infestations, removing garbage, and preventing further degradation of the site.

Recent Contamination History of the Lewis Property

The property is currently owned by the Lewis Construction Co. Gravel mining and storage of chemicals occurred on the north side of the Sun River on the Lewis Property (Appendix 2). Chemicals were stored in above ground and buried 55-gallon drums. In addition, three Underground Storage Tanks (UST's) were present on the Lewis Property. The parcel for sale was approximately 180 acres. MFWP proposes to purchase 134 acres of the Lewis Property. This portion of the parcel is not where the drums or UST's were located. However, the entire property is encumbered by a Montana Comprehensive Environmental Cleanup and Responsibility Act (CECRA) listing.

According to Earl Griffith, Tetra Tech, Inc., two events at the Lewis Construction Co. came under CECRA listing (Appendix 3; Tetra Tech, Inc. Memorandum dated January 11, 2005):

Event 1: In 1989-1990, 456, 55-gallon drums (buried and above ground) were removed. Of these, 301 were excavated and found to contain highway striping paint, paint solvent (methyl ethyl ketone; MEK), log oil, oil filters, or other debris. Above ground drums (150) contained paint and paint residue. In 1990, sampling by Montana Department of Health and Environmental Services (DHES) revealed ground-water contamination by MEK and benzene in a potable aquifer, and the facility was added to the Montana CECRA list. In 2003 the Montana Department of Environmental Quality (DEQ) ranked the site as a high priority due to the historic ground water data and lack of soil sample data. To delist the entire Lewis Property from the DEQ high priority list, DEQ must have data to confirm that soil and groundwater are not contaminated.

Event 2: In 1992 three leaking UST's containing diesel and gasoline were removed from the Lewis Property. In 1993, contaminated soil from the leaking UST's was removed. The Montana DEHS-UST program declared the cleanup was successful and that there was no longer contamination from the leaking UST's.

Delisting Lewis Property

Montana Fish, Wildlife & Parks will only purchase the proposed FAS if the Lewis Property is delisted from the DEQ CECRA list; in other words – is not contaminated. If the contamination is not shown to be cleaned up on the entire Lewis Property prior to MFWP purchasing the proposed

FAS (Parcel 1), MFWP could be held liable for any contamination clean-up on any of the Lewis Property, due to joint sever liability. Thus MFWP will incur all costs associated with delisting the Lewis Property from the CECRA list. Finally, if no contamination is found at the source on the Lewis Property, then contamination cannot move into the proposed FAS.

To delist the Lewis Property, DEQ has requested that one soil sample and four water samples (one surface, and 3 below ground) be collected and tested for contaminants during high water and low water events (Appendix 4; Tetra Tech, Inc. Memorandum dated December 15, 2004). These samples are to be taken in the same location as water samples were taken in 1992. The samples required are as follows: 1 & 2) one soil and one below-ground water sample at the site of contamination; 3) one below-ground water sample to the east of original contamination; 4) one below ground water sample to the south of original contamination; and 5) one surface water sample in pond south of the contamination site. These sites were located as such to first identify contamination in the most likely area it would occur, and secondly to identify contamination if it had migrated down a gradient (either to the east or south). Benzene and MEK would leave a trace behind if they were to have migrated.

Montana Fish, Wildlife & Parks has hired Tetra Tech, Inc. to perform testing at the Lewis Property. On February 24, 2005 the sampling occurred during low water. Three 1-inch wells were installed (exact descriptions and locations of wells can be found in Appendix 5). One well was installed at the site of contamination, one down-gradient to the east, and one down-gradient to the south (towards the Sun River and proposed FAS). Water samples were taken in all three wells. A soil sample was taken at the soil-water interface in the well at the original contamination site. Finally, a surface water sample was taken in a pond to the north of the original contamination site. The pond that was sampled in 1992 has been dry for several years, thus the sample was taken in the next closest pond. All samples were analyzed using EPA protocol 8260, which includes MEK (Appendix 5). None of the samples had any of the listed constituents above detection levels (Appendix 5). Samples will again be taken during high water. High water usually occurs in late May to early June on the Sun River. Therefore exact sampling time cannot be projected at this time. If the high water samples are found to contain no contaminates then DEQ will delist the site and MFWP can continue with the acquisition.

The Land Acquisition Transaction

Should the land acquisition go forward, MFWP will purchase the land, mineral rights, and water rights (except Provisional Water Right Permit number 10436-00 for 1.20 cfs on the Sun River) on 134-acres of the 180-acre Lewis Property. MFWP will grant Lewis Construction Co an access easement across the MFWP access road to 45.03 acres of property (Remainder Property) not purchased by MFWP. Purchase agreement is contingent on delisting the entire Lewis Property from Montana DEQ high priority list.

Future Development of the Site

This EA addresses only the acquisition of the proposed FAS and does not evaluate any development on the property. A separate EA would be prepared and made available for public comment in advance of any site development plans. However, it is prudent to discuss long-term plans for the property within this document.

The site would be developed as a FAS. The access road needs improvement. MFWP would incur minor costs as the roadway is mostly in place. Approximately 0.25 miles of fencing is needed, mostly on the south side of the Sun River. Further development may include: a latrine, boat ramp, and a parking area.

MFWP would manage noxious weeds on the land. The majority of the weeds are concentrated on the north side of the Sun River. Weeds will be aggressively managed the first three years in an attempt to decrease the infestation.

PART II. ENVIRONMENTAL REVIEW

1. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a comparison of the alternatives with the proposed action/preferred alternative:

Alternative A: No Action
Acquisition of land on the lower third of the Sun River is a priority for management of the river by MFWP. If the proposed FAS is not purchased by MFWP there will continue to be a lack of public access to the Sun River between the towns of Sun River and Great Falls.

If no action is taken the land would continue to be owned by the Lewis Construction Company. Tests of contaminates at the Lewis Property may not be performed and it would not be delisted from the DEQ high priority list. In addition, land could be purchased by someone else and the opportunity to gain public access to the Sun River would be lost. Finally, without the implementation of the MFWP weed control program, weed infestations at the Lewis Property would continue to be a problem.

Alternative B: Purchase portion of Lewis Property
Purchase of 134.07 acres of the Lewis Property (proposed FAS) would satisfy objectives in the MFWP Sun River management strategy, to increase recreational opportunities on the Sun River. The site is located between the towns of Sun River and Vaughn, an area where there is no public access to the Sun River. The proposed FAS is located six river miles downstream of MFWP Medicine River FAS. Thus, the site could be used as a primary takeout point for anglers, hunters and floaters on the Sun River. There is a pond located on the proposed FAS that would create numerous opportunities for waterfowl hunters, and the potential for a high quality public fishery.

Acquisition of the proposed FAS by MFWP would enhance the site by providing public access, controlling weed infestations, and preventing further degradation of the site. Purchase by another entity would likely preclude public access to the Sun River. MFWP manages FAS to protect and enhance resources at each site. Weed infestations along the Sun River are problematic. Implementation of the MFWP weed protocol would improve on-site vegetation. There would be high costs associated with weed management, as there is a large infestation of leafy spurge and spotted knapweed. MFWP would only purchase a portion of the Lewis Property to minimize the amount of leafy spurge at the FAS. The Lewis Property was previously used as a storage facility for chemicals and as a gravel mine for a construction company. MFWP will incur costs to test for contaminants. Delisting of the Lewis Property from the DEQ high priority list will enhance the value of the property.

The Lewis Property is a good location for a FAS as an access road is already in place, and only minor repairs would need to be performed. In addition, only about 0.25 miles of fencing is needed. The terrain at the proposed FAS would be good for construction of a parking area or latrine in future development.

Alternative C: Purchase Alternate Property
MFWP investigated purchase of an alternate property owned by the Tribby family, located approximately ½ mile downstream from the Lewis Property. Purchase of the Tribby property would satisfy objectives in the MFWP Sun River management strategy to increase recreational opportunities on the Sun River. The site is located between the towns of Sun River and Vaughn, an area where there is no public access to the Sun River. The property is 5-20 acres, and is heavily disturbed by gravel mining. Approximately one mile of road construction would be needed to allow access to the site. In addition one mile of fencing would be needed. Maintenance costs would be higher than Lewis Property due to two to four times more road and fencing. In addition, there would be high costs associated with weed management as there is a high infestation of leafy spurge. There is a bank erosion problem at the site due to gravel mining operations. It is estimated that the cost of bank restoration could approach $50,000. Finally, the access road may encroach on gravel pit pond wetland habitat.

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

Not applicable

PART III. NARRATIVE EVALUATION AND COMMENT

This analysis did not reveal any significant impacts to the human or physical environment.

The proposed project consists only of transfer of ownership from the Lewis Construction Company to the State of Montana. No additional construction or improvements of any kind are included in this proposal.

PART IV. PUBLIC PARTICIPATION

1. Describe the level of public involvement for this project if any, and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?

The public will be notified in the following ways to comment on the EA of the Lewis Property, Sun River Acquisition:

1. Legal notices will be published in the *Great Falls Tribune* and the *Helena Independent Record*.
2. Legal notice and the draft EA will be posted on the Fish, Wildlife, & Parks web page: *http://fwp.state.mt.us/publicnotices*

This level of public involvement is appropriate for a project of this small scale.

2. Duration of comment period, if any.

The public comment period will be 30 days. Comments may be emailed to akuser@mt.gov, or written comments may be sent to the following address:

Allan Kuser
Montana Fish, Wildlife & Parks
1420 East Sixth Ave.
Helena, MT 59601

PART V. EA PREPARATION

1. Based on the significance criteria evaluated in this EA, is an EIS required? NO
If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action.

Based on an evaluation of impacts to the physical and human environment under MEPA, this environmental review revealed no significant negative impacts from the proposed action: therefore, an EIS is not necessary and an environmental assessment is the appropriate level of analysis.

2. Name, title, address and phone number of the person(s) responsible for preparing the EA:

Allan Kuser	Steve Leathe	Sally Schrank
MFWP FAS Coordinator	MFWP Reg. 4 Fisheries Manager	Independent Contractor
1420 East Sixth Ave	4600 Giant Springs Road	112 Riverview C

Helena, MT 59601	Great Falls, MT 59404	Great Falls, MT 59404
(406) 444-7885	(406) 454-5855	(406) 268-0527

3. List of agencies consulted during preparation of the EA:

Montana Fish, Wildlife & Parks
- Parks Division
- Wildlife Division
- Fisheries Division
- Lands Section

Montana Natural Heritage Program – Natural Resources Information System (NRIS)

PART VI. MEPA CHECKLIST

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES **Will the proposed action result in:**	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Soil instability or changes in geologic substructure?		X				1a.
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?		X				
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

1a. The proposed action involves only a transfer of ownership of property and does not include development or physical alteration of the property of any kind.

PHYSICAL ENVIRONMENT

2. AIR **Will the proposed action result in:**	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Emission of air pollutants or deterioration of ambient air quality? (also see 13 (c))		X				2a.
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. For P-R/D-J projects, will the project result in any discharge which will conflict with federal or state air quality regs? (Also see 2a)		NA				
f. Other		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

2a. The proposed action involves only a transfer of ownership of property and does not include development or physical alteration of the property of any kind.

PHYSICAL ENVIRONMENT

3. WATER **Will the proposed action result in:**	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X				
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of flood water or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?				X		3f.
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?			X			3h.
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l.For P-R/D-J, will the project affect a designated floodplain? (Also see 3c)		NA				
m. For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a)		NA				
n. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

3f. The acquisition of the proposed FAS will only occur if the Lewis Property is delisted from the CECRA list. In 1989-1990, 456, 55-gallon drums (buried and above ground) were removed from the Lewis Property. Of these, 301 were excavated and found to contain highway striping paint, paint solvent (methyl ethyl ketone; MEK), log oil, oil filters, or other debris. Above ground drums (150) contained paint and paint residue. In 1990, sampling by DHES revealed ground-water contamination by MEK and benzene in a potable aquifer, and the facility was added to the Montana CECRA list. In 2003 (DEQ ranked the Lewis Property as a high priority due to the historic ground water data and lack of soil sample data. To delist the Lewis Property, DEQ has requested that one soil sample and four water samples (one surface, and 3 below ground) be collected and tested for contaminants during high water and low water events (Appendix 4; Tetra Tech, Inc. Memorandum dated December 15, 2004). These samples are to be taken in the same location as water samples were taken in 1992. The samples required are as follows: 1 & 2) one soil and one below-ground water sample at the site of contamination; 3) one below-ground water sample to the east of original contamination; 4) one below ground water sample to the south of original contamination; and 5) one surface water sample in pond south of the contamination site. These sites were located as such to first identify contamination in the most likely area it would occur, and secondly to identify contamination if it had migrated down a gradient (either to the east or south). Benzene and MEK would leave a trace behind if they were to have migrated.

Montana Fish, Wildlife & Parks has hired Tetra Tech, Inc. to perform testing at the Lewis Property. On February 24, 2005 the sampling occurred during low water. Three 1-inch wells were installed (exact descriptions and locations of wells can be found in Appendix 5). One well was installed at the site of contamination, one down-gradient to the east, and one down-gradient to the south (towards the Sun River and proposed FAS). Water samples were taken in all three wells. A soil sample was taken at the soil-water interface in the well at the original contamination site. Finally, a surface water sample was taken in a pond to the north of the original contamination site. The pond that was sampled in 1992 has been dry for several years, thus the sample was taken in the next closest pond. All samples were analyzed using EPA protocol 8260, which includes MEK (Appendix 5). None of the samples had any of the listed constituents above detection levels (Appendix 5). Samples will again be taken during high water. High water usually occurs in late May to early June on the Sun River. Therefore exact sampling time cannot be projected at this time. If the high water samples are found to contain no contaminates then DEQ will delist the site and MFWP can continue with the acquisition.

This action will identify the quality of the groundwater, and likely show it has improved.

3h. MFWP will acquire all water rights to the property, with the exception of Provisional Water Right Permit number 10436-00 for 1.20 cfs on the Sun River.

PHYSICAL ENVIRONMENT

4. VEGETATION Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?				X		4a.
b. Alteration of a plant community?				X		See 4a.
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				4c.
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?				X		4e.
f. For P-R/D- J, will the project affect wetlands, or prime and unique farmland?		NA				
g. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

4a. The Lewis Property has a high infestation of noxious weeds, primarily leafy spurge, and the current owners have not had an active weed management program. The real estate broker has released bio-bugs for leafy spurge on the Lewis property for the past two years. If MFWP acquires the land, the department would initiate weed control as part of the management of the property, and the diversity of the plant community would likely increase as a result. In addition, fixing the south side fence would prevent any grazing. Revegetating the denuded areas and preventing vehicular traffic will improve the diversity of vegetation at the proposed FAS. Management of the property by MFWP will improve the vegetation at the site.

4c. The Natural Heritage Program found no plant species of concern at the Lewis Property (February 24, 2005).

4e. If FWP acquires the land, the current infestation of noxious weeds would be dealt with aggressively for the next three years, at which time the infestation would be reassessed.

PHYSICAL ENVIRONMENT

5. FISH/WILDLIFE Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?			X positive			5a.
b. Changes in the diversity or abundance of game animals or bird species?			X positive			See 5a.
c. Changes in the diversity or abundance of nongame species?			X positive			See 5a.
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				5f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?			X positive			See 5a.
h. For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f)		NA				
i. For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d)		NA				
j. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

5a. The current owners of the property do not actively manage fish and wildlife. Therefore, people are using the property without any guidelines, rules, or threat of enforcement. At present, this use is light and there seems to be limited damage done. The most visible problem seems to be the weed infestation caused by vehicle traffic and off-road use. In addition, there are ATV tracks crossing the Sun River and on the south side of the property. Ownership and management by FWP would ensure that human use of the proposed FAS would be managed in accordance with regulations that protect habitat and wildlife populations while providing public access. Therefore, it is reasonable to expect that habitat and the diversity of game and non-game animals would improve to a minor degree as a result of this action.

5f. The Natural Heritage Program found no animal species of concern at the Lewis Property (February 24, 2005). The site has the potential for usage by transient bald eagles or sandhill cranes; however, MFWP has no records of such observations.

B. HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Increases in existing noise levels?		X				6a.
b. Exposure of people to serve or nuisance noise levels?		X				6b.
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

6a. The proposed action involves a transfer of ownership of property and does not involve construction or development of any kind.

6b. Noise caused by recreational use will be very little and should not be a nuisance to any neighbor.

HUMAN ENVIRONMENT

7. LAND USE Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				7a.
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				
e. Other: _____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

7a. The proposed action involves a transfer of ownership of property and does not involve construction or development of any kind

HUMAN ENVIRONMENT

8. RISK/HEALTH HAZARDS Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X		Yes	8a.
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. For P-R/D-1, will any chemical toxicants be used? (Also see 8a)		NA				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

8a. The FWP Region 4 Weed Management Plan calls for an integrated method of managing weeds, including the use of herbicides. The use of herbicides would be in compliance with application guidelines and conducted by people trained in safe handling techniques. Weeds would also be controlled using mechanical or biological means in certain areas to reduce the risk of chemical spills or water contamination.

HUMAN ENVIRONMENT

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

HUMAN ENVIRONMENT

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify: _____		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				10b.
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased used of any energy source?		X				
e. Define projected revenue sources						10e.
f. Define projected maintenance costs.						10f
g. Other:_____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

10b. Fish, Wildlife and Parks pays taxes “in a sum equal to the amount of taxes which would be payable on county assessment were it taxable to a private citizen” (MCA 87-1-603). Therefore, there will be no effect of this action on the local tax base.

10e. The funding source for this acquisition shall be the Fishing Access Acquisition Fund ($150,000).

10f. For the first three years of ownership, there will be above normal weed control costs, due to the substantial amount of leafy spurge present on-site and in adjacent lands along the Sun River. It would cost approximately $4,000 - $5,000 per year to maintain this site, including road, fences, and weed control.

HUMAN ENVIRONMENT

11. AESTHETICS/RECREATION Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)			X			11c.
d. For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c)		NA				
e. Other:		NA				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

11c. The proposed FAS will increase the quality and quantity of tourism on the Sun River. Currently there is no public access to the Sun River between the towns of Sun River and Great Falls. The addition of river acreage on the Sun River would be a prime location for hunters, anglers, and recreationists throughout the year. The proposed FAS could be used as a takeout for anglers, hunters, and floaters who launch their craft at Medicine River FAS in the town of Sun River, located five to six miles upstream from this proposed site. The grasslands have the potential for use by upland game bird hunters. In addition, the pond could be used by waterfowl hunters, and has a potential to be a high quality fishery.

HUMAN ENVIRONMENT

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				12a.
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. For P-R/D-J, will the project affect historic or cultural resources? **Attach SHPO letter of clearance.** (Also see 12.a)		NA				12d.
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

12a. In a future EA the MFWP shall identify any heritage properties that are located on department lands within the area affected by a proposed project and shall consult with the SHPO regarding how to address any impacts the project would have on the cultural site.

12d. The acquisition of property is not a project or undertaking as defined by MFWP cultural resource policy in acted under the State Antiquities Act.

HUMAN ENVIRONMENT

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e)		NA				
g. For P-R/D-J, list any federal or state permits required.		NA				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

APPENDIX 1

23-1-110 MCA EXEMPTION FORM
Lewis Property, Sun River Acquisition

Use this form when a park improvement or development project meets the criteria identified in 12.8.602 (1) ARM, but determined to NOT significantly change park features or use patterns.

State Park or Fishing Access Site Project Description

Montana Fish, Wildlife & Parks (MFWP) proposes to purchase the Lewis Property (134.07 acres) using funds from the Fishing Access Acquisition Fund, for the purpose of creating an additional Fishing Access Site (FAS) on the Sun River.

The project does not significantly change park or fishing access site features or use patterns.

Reason for exemption is provided across from the appropriate item below.

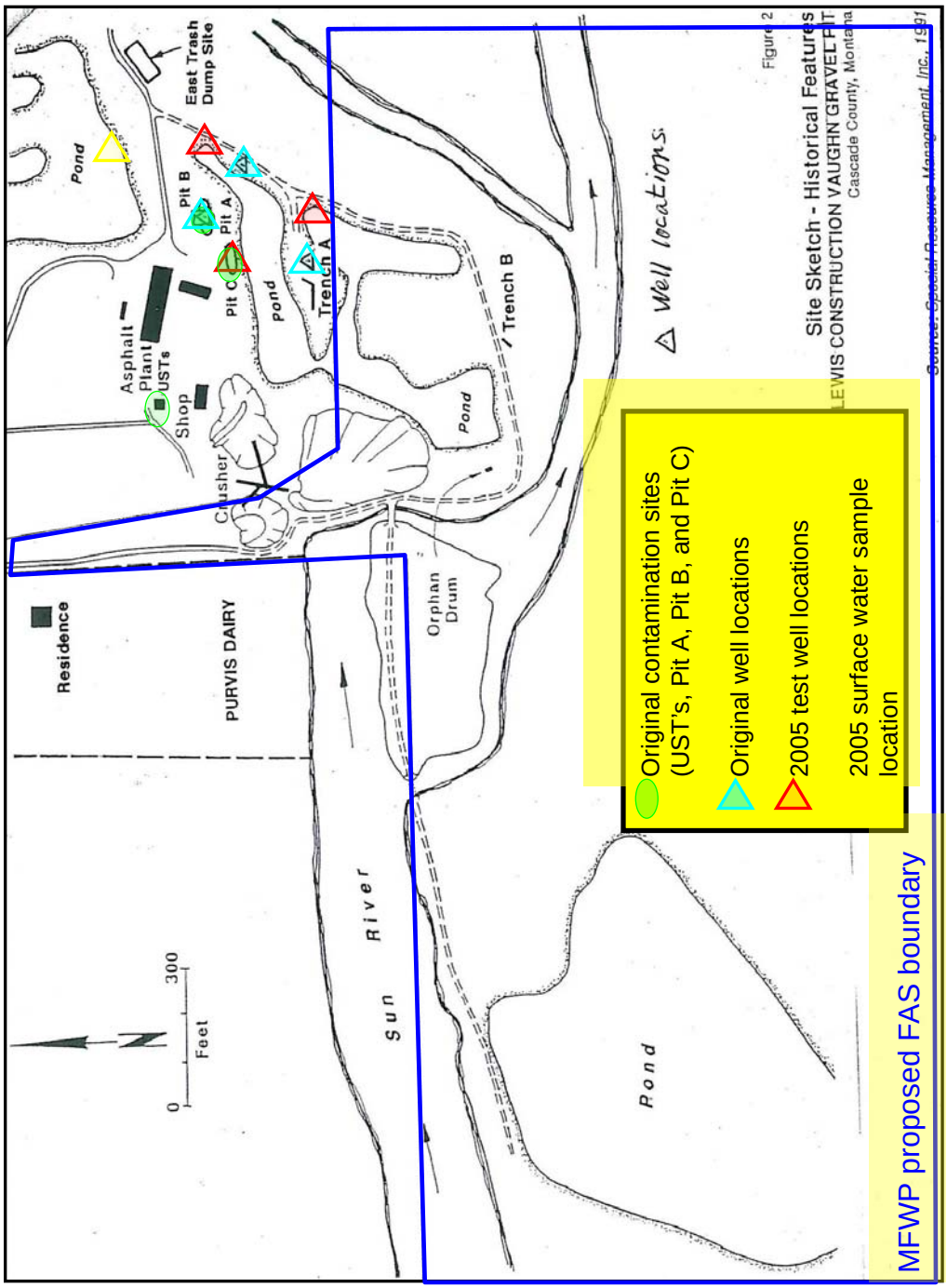
12.8.602 (ARM) (1)	**Reason for Exemption**
(a) Roads/trails	No new roads/trails
(b) Buildings	No new buildings
(c) Excavation	None
(d) Parking	No new parking
(e) Shoreline alterations	None
(f) construction into water bodies	None
(g) construction w/impacts on cultural artifacts	None
(h) Underground utilities	No new utilities
(i) Campground expansion	None-day use only

Some activities considered that do not significantly impact site features or use patterns include signing, fencing, barriers, road grading, garbage collection, and routine maintenance.

Signature___(Sally Schrank)____ _____Date___March 4, 2005____

APPENDIX 2

Location of Original Contamination and Well Sites on the Lewis Property



APPENDIX 3
Tetra Tech, Inc. Memorandum dated January 11, 2005

TETRA TECH, INC.
2969 Airport Road
Helena, MT 59601
Telephone (406) 449-3440
FAX (406) 449-3445
E-mail: tetrahln@ixi.net

January 11, 2005

Ms. Darlene Edge
Montana Department of Fish Wildlife and Parks
Lands Division
P. O. Box 200701
Helena, MT. 59620-0701

RE: Lewis Gravel Pit CECRA Listing and Historic Barrel Removal

Dear Ms. Edge,

Two events at the Lewis Construction Co. gravel pit came under regulatory oversight. First, in 1989-1990 I oversaw the removal of over 450 buried and above-ground drums from the site. Upon completion of inventory and removal offsite, my job was done. However, follow up sampling by the DHES revealed ground-water contamination by MEK and benzene in a potable aquifer, and the facility was added to the State's CECRA list. However, since no soil samples were collected, the question of a possible source always remained.

In March 2003, the DEQ reranked the site based on the historic ground-water data, and lack of soil data and it ended up being reranked as "high priority". The site was never off the list, however. In order to get the facility 'delisted', the DEQ must have data that confirm soil and ground water are not still affected by potential contaminants. The Work Plan I prepared will address the above deficiencies and hopefully lead to the facility being delisted.

As far as site history is concerned, the two event are as follows:

- 1989-1990 Excavation and removal of 301 buried 55 gallon drums containing highway striping paint, paint solvent (MEK), log oil, and numerous other drums with used oil filters and other debris. Inventory and removal of over 150-55 gallon drums containing paint and paint residue stored on the surface.
- Discovery and removal of three leaking USTs containing diesel and gasoline. The tanks were removed in 1992, and contaminated soils removed in 1993. The DEHS-UST program closed the file on the USTs in 1993.

This should address the questions and needs you had on this facility. If you have any more questions, give me a call ASAP.

Respectfully,

Earl F. Griffith PG
Wyoming # 1033
11 Jan 2005

APPENDIX 4
Tetra Tech, Inc. Memorandum dated December 15, 2004

TETRA TECH, INC.
2969 Airport Road
Helena, MT 59601
Telephone (406) 449-3440
FAX (406) 449-3445
E-mail: tetrahln@ixi.net

December 15, 2004

Ms. Darlene Edge
Montana Department of Fish Wildlife and Parks
Lands Division
P. O. Box 200701
Helena, MT. 59620-0701

RE: Lewis Gravel Pit Sampling Requirements at Vaughn MT.

Dear Ms. Edge,

My visit with DEQ staffers Amiee Reynolds, and Lawrence Hanson firmed up the sampling needs as a part of the pending land exchange. The sampling conducted years ago (1990) showed concentrations of benzene and methyl ethyl ketone (MEK) in ground water at levels above the MCLs for both contaminants. The DEQ is requesting that high water and low water events be performed. Thus, we'll have to complete three (3) wells with surface protection for security. These wells will be located as follows:

- The downgradient end of Pit C/B.
- On the SE side of the pit pond.
- Just east of trench A.

Although the contaminants are extremely volatile and soluble, the concern is that some residual contamination may remain in ground water. Sampling should be conducted in late December or early January for the low water event and then again in late May or early June for the high water event.

My recollection of site conditions is that drilling 2-inch wells should not be a problem. I've contacted Neil Consultants and obtained an estimate for the 3 wells (enclosed). They will use their very mobile Power Probe unit for well completion and I will be on site to locate the rig and conduct sampling.

Sampling costs are driven by the MEK which is in the "Long List" of VOCs. Each analysis under the 'Long List' is $200.00.

In addition to the ground water, the State requested the nearby pond be sampled for the same parameters, as was done in 1990.

All I need in order to proceed is authorization from you folks. In addition to the well completion, sampling, and report preparation for two events, I will help with the Brownfields effort. If you have any questions, please call me immediately.

Respectfully,

Earl F. Griffith PG
Wyoming # 1033
15 December 2004

Enclosure: (1) Work Plan and Cost Estimate for Environmental Assessment

APPENDIX 5
Tetra Tech, Inc.; Sampling Results for Soil and Ground Water Analyses

Sampling Results for Soil and Ground Water Analyses

Lewis Gravel Pit

Vaughn, Mt

Prepared for:
Ms. Darlene Edge
Montana Department of Fish Wildlife and Parks
Lands Division
Helena, MT 59620-0701

Prepared By:
Tetra Tech Inc.
2969 Airport Road
Helena, MT 59601

March 29, 2005

TETRA TECH

TETRA TECH, INC.
2969 Airport Road
Helena, MT 59601
Telephone (406) 449-3440
FAX (406) 449-3445
E-mail: tetrahln@ixi.net

March 29, 2005

Ms. Darlene Edge
Montana Department of Fish Wildlife and Parks
Lands Division
P. O. Box 200701
Helena, MT. 59620-0701

RE: Sampling Results-Lewis Gravel Pit Soil and Ground Water Analyses

Dear Ms. Edge,

On 24 February 2005, I met with Neil Consultants' engineer, Shane Broesder, and proceeded to the old gravel pit site. Numerous 2-track trails allowed us access to the site without the necessity of dealing with the locked gates.

Once on the site, it took some time to properly locate myself because no landmarks from 1989 remained, and the areas that had been excavated were completely overgrown with grass, shrubs, and small trees.

1.0 Well Completion

Well MW-1 was finally located in the middle of the digout designated 'Pit C' because pits A and B could not be located precisely enough. Confirmation of Pit C was made from the numerous chips of yellow paint scattered throughout the site. The well was drilled initially with tooling that would have enabled construction of a 2-inch PVC well. Immediately following soil sample collection from 8-9.5 feet, the auger tool disconnected from the rig and dropped into the hole. With the loss of the tool, completing the hole already started and drilling and any more 2-inch holes was a lost option. In order to continue drilling, I suggested we move to direct push technology and the construction of 1-inch i.d. wells.

Thus, MW-1 was completed as a 1-inch well. It is located 27 feet south and 12 feet east of the power pole that is two (2) poles east of the back-guyed, underground conduit pole with the disconnects for 3 Ø power. The well was sampled after minor purging and simply capped with a 1-inch PVC cap. Since no flush mount was used to cover the well, every effort was made to obscure its presence by making it flush with the ground. Between the coordinates off the power pole, and insertion of steel wire around the bore, the well can be easily located with a magnetic locator.

The well was completed with 10 feet of screen in silty fine to medium sand with minor gravel from about 9.5 feet to the bottom, and a 10 foot section of casing for the upper units of fine sand (0'-3.5' bgs), gravel (3.5'-6' bgs), and dirty sand (6'-9.5' bgs).

Because of the small well diameter and lack of flush mount protection, the well was located well outside the obvious 2-track driving areas.

Well LGPMW-2 was located at the northeast corner of the northeast trending dogleg of the pond just south of Pit C. Since 1989 when the drums were excavated it appears the 'pond' has received minimal ground-water in filling and in February 2005 there was no surface water anywhere in it. This well was located 5 feet north of the 'pond's' northeast edge and 20 feet west of the access road. The well was completed to a depth of 18.7 feet in materials similar to well # 1. This well was completed in like manner with 10 feet of slotted screen and 8.7 feet of blank casing cut off at ground level and capped.

Well LGPMW-3 was placed in the south 'pond' adjacent to a two track road that traverses an internal berm. This well is about 280 feet SSW of well # 2. the tentative site for the well was just east of where a slot trench had been excavated in 1989, but the heavy traffic on the two track precluded that option. Putting this well inside the 'pond' places it downgradient from the drum removal areas and between the excavations and the river.

This well was completed as a 15 foot well with 10 feet of screen and 5 feet of casing. It too was located outside the primary traffic routes.

The final sample was collected from the frozen pond located just north of LGPMW-2. Since the pond to the south of the drum excavation locations was dry (and appeared to have been dry for some time) the sample was collected from the only pond proximal to the excavations that had water. Approximately six inches of ice were removed to open up the pond surface for sampling.

Sampling locations are shown graphically on the enclosed site figure (SRM-Figure 2) and photographs of the wells are in Appendix A.

2.0 Results

The samples were all analyzed using EPA protocol 8260 (long list) so that MEK would be picked up in the analyses.

None of the samples had any of the listed constituents above detection levels. Thus, at the locations sampled, there are no data showing the presence of either benzene or MEK as was the case in 1992. Analytical results are in Appendix B.

3.0 Discussion

During the initial planning phases with Ms. Amiee Reynolds and Mr. Lawrence Hanson of the DEQ, there was a sense that after 12-13 years the likelihood that any MEK or benzene still remaining in ground water or soil was very slim. The analytical results appear to bear this out.

Apparently the 15 (+) years between removal of the buried and surface stored drums and the leaching from normal precipitation events coupled with above average stream flows through the flood plain alluvium have helped flush any residual contamination out of the area. This flushing effect in conjunction with natural attenuation may have successfully remediated any contamination remaining from the activities on the site.

4.0 Future Sampling

As noted in the work plan, two sampling events were planned. In a normal water year the maximum flow (and presumed maximum flood plain ground-water elevation) occurs in late May to early June. However, because of the very low snow pack in the Sun River watershed this year, the

peak flow may come off sooner. Thus, timing of the second sampling event will be driven by the peak flow and may require daily observance of the gaging data for the Sun River at Vaughn. To ensure a proper 'high water' event, I will do what is necessary. During this event, the well casing elevations will be established, depth to ground water taken, and these data compared to the surface water elevation at two locations (due south of the wells, and due east). From these measurements a good read on the river's effects on the ground water can be established.

Report Prepared by

Earl F. Griffith

Earl F. Griffith PG
Wyoming # 1033
29 March 2005

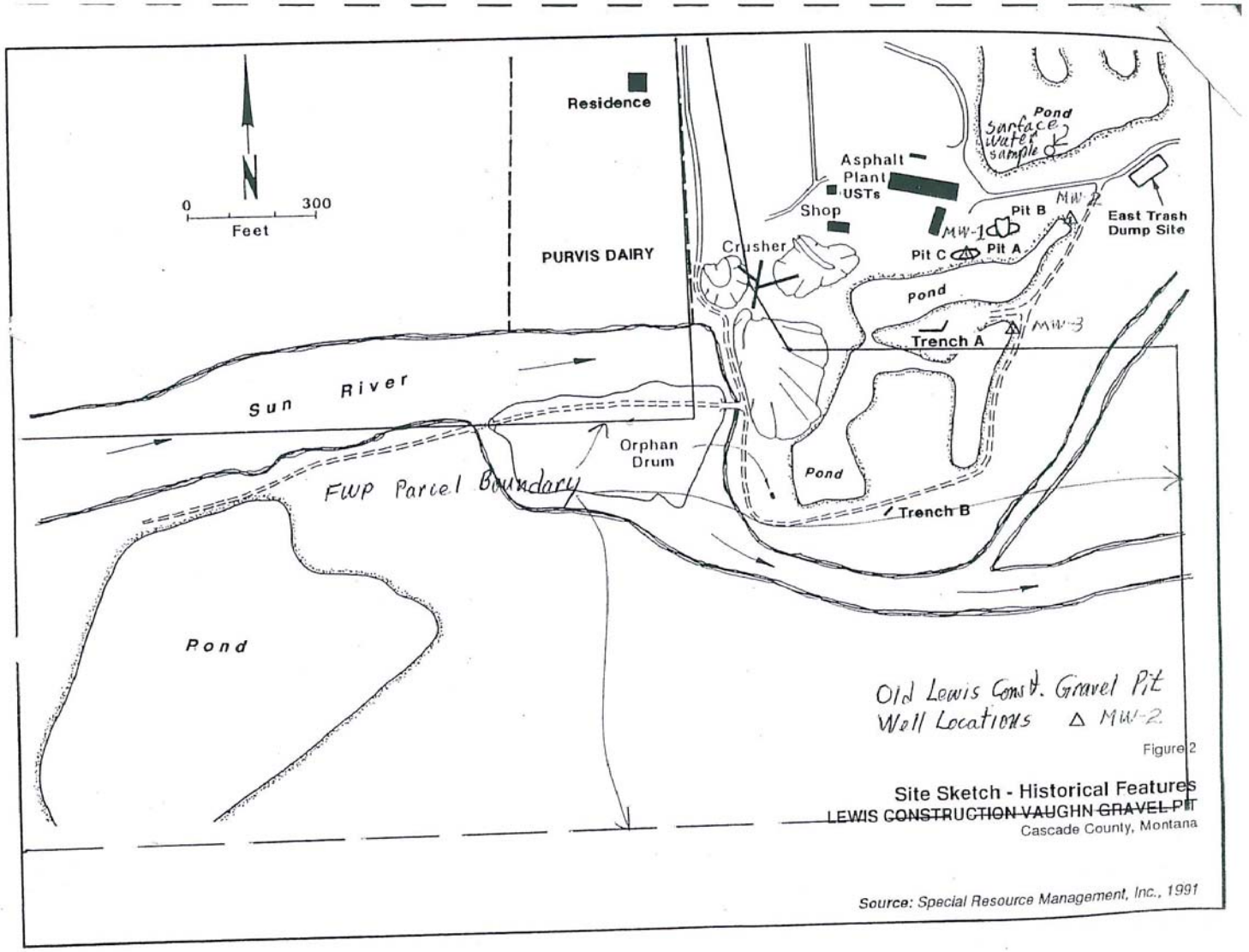


Figure 2

Site Sketch - Historical Features
LEWIS ~~CONSTRUCTION VAUGHN GRAVEL PIT~~
Cascade County, Montana

Source: Special Resource Management, Inc., 1991

Alpine Analytical, Inc.
1315 Cherry, Helena, MT 59601 (406)449-6282

Case Narrative

On February 25, 2005, four water samples and one soil sample from a project identified as "Lewis Gravel Pit" were received by our laboratory for analysis. The chain of custody indicated that the samples were to be analyzed for 8260-Volatile Organic Compounds Long List. The samples were received cool, intact, and hand delivered by Earl T. Griffith.

Results are summarized on the following page.

Should you have any questions regarding this analysis feel free to give us a call at 449-6282 or 800-814-6282.

We appreciate the fact that you have chosen us as your analytical lab.

Sincerely yours,

Harry Howell
Laboratory Manager

Alpine Analytical, Inc.
1315 Cherry, Helena, MT 59601 (406)449-6282

Client: Tetra Tech Inc.
Project ID: Lewis Gravel Pit
Site ID: 15647-01
Date Sampled: 24-Feb-05
Date Received: 25-Feb-05
Chain of Custody #: 4886

8260 - VOLATILE ORGANIC COMPOUNDS - LONG LIST	LGP-MW-1	LGP-MW-2	LGP-MW-3	LGP-SS01 8-9.5 bgs	LGP-NPSW
Units	ug/L	ug/L	ug/L	ug/g	ug/L
Target Analytes Detected	No Analytes Detected	No Analytes Detected	No Analytes Detected	No Analytes Detected	No Analytes Detected

Alpine Analytical, Inc.
1315 Cherry, Helena, MT 59601 (406)449-6282

VOLATILE ORGANIC COMPOUNDS - LONG LIST

Client:	Tetra Tech Inc.	**Date Reported:**	09-Mar-05
Sample ID:	LGP-MW-1		
Project ID:	Lewis Gravel Pit	**Chain of Custody No.:**	4886
Site ID:	15647-01		
Laboratory ID:	12B303	**Date / Time Sampled:**	24-Feb-05 @ 14:30
Sample Matrix:	Water	**Date / Time Received:**	25-Feb-05 @ 09:30
Preservatives:	HCl	**Date Extracted:**	NA
Condition:	Intact	**Date Analyzed:**	02-Mar-05 @ 14:00

Parameter	Analytical Result	PQL	Parameter	Analytical Result	PQL
dichlorodifluoromethane	ND	1	1,2-dibromoethane	ND	1
chloromethane	ND	1	chlorobenzene	ND	1
vinyl chloride	ND	1	1,1,1,2-tetrachloroethane	ND	1
bromomethane	ND	1	ethylbenzene	ND	1
chloroethane	ND	1	*m, p*-xylene	ND	1
trichlorofluoromethane	ND	1	*o*-xylene	ND	1
1,1-dichloroethene	ND	1	styrene	ND	1
methylene chloride	ND	1	isopropylbenzene	ND	1
trans-1,2-dichloroethene	ND	1	bromoform	ND	1
1,1-dichloroethane	ND	1	1,1,2,2-tetrachloroethane	ND	1
2,2-dichloropropane	ND	1	1,2,3-trichloropropane	ND	1
cis-1,2-dichloroethene	ND	1	n-propylbenzene	ND	1
chloroform	ND	1	bromobenzene	ND	1
bromochloromethane	ND	1	1, 3, 5-trimethylbenzene	ND	1
1,1,1-trichloroethane	ND	1	2-chlorotoluene	ND	1
1,1-dichloropropene	ND	1	4-chlorotoluene	ND	1
carbon tetrachloride	ND	1	tert-butylbenzene	ND	1
1,2-dichloroethane	ND	1	1, 2, 4-trimethylbenzene	ND	1
benzene	ND	1	sec-butylbenzene	ND	1
trichloroethene	ND	1	p-isopropyltoluene	ND	1
1,2-dichloropropane	ND	1	1,3-dichlorobenzene	ND	1
bromodichloromethane	ND	1	1,4-dichlorobenzene	ND	1
dibromomethane	ND	1	n-butylbenzene	ND	1
cis-1,3-dichloropropene	ND	1	1,2-dichlorobenzene	ND	1
toluene	ND	1	1,2-dibromo-3-chloropropane	ND	1
trans-1,3-dichloropropene	ND	1	1, 2, 4-trichlorobenzene	ND	1
1,1,2-trichloroethane	ND	1	hexachlorobutadiene	ND	1
1,3-dichloropropane	ND	1	naphthalene	ND	1
tetrachloroethene	ND	1	1, 2, 3-trichlorobenzene	ND	1
chlorodibromomethane	ND	1	iodmethane	ND	1
acetone	ND	50	methyl ethyl ketone	ND	20
carbon disulfide	ND	1	methyl isobutyl ketone	ND	20
2-chloroethyl vinyl ether	ND	1	1,3,5-trimethylbenzene	ND	1
2-hexanone	ND	20	vinyl acetate	ND	1

Comments:

ND - Not Dectected outside the parameters
NA - Not Applicable
PQL - Practical Quantitation Limit
All results are reported as ug/L.

Surrogate	Recovery	Recovery Acceptance Range
Dibromofluoromethane-SS	96%	50 - 150%
Toluene-d8-SS	97%	50 - 150%
4-Bromofluorobenzene-SS	108%	50 - 150%

Reviewed by:

Alpine Analytical, Inc.
1315 Cherry, Helena, MT 59601 (406)449-6282

VOLATILE ORGANIC COMPOUNDS - LONG LIST

Client:	Tetra Tech Inc.	**Date Reported:**	09-Mar-05
Sample ID:	LGP-MW-2		
Project ID:	Lewis Gravel Pit	**Chain of Custody No.:**	4886
Site ID:	15647-01		
Laboratory ID:	12B304	**Date / Time Sampled:**	24-Feb-05 @ 15:43
Sample Matrix:	Water	**Date / Time Received:**	25-Feb-05 @ 09:30
Preservatives:	HCl	**Date Extracted:**	NA
Condition:	Intact	**Date Analyzed:**	02-Mar-05 @ 14:27

Parameter	Analytical Result	PQL	Parameter	Analytical Result	PQL
dichlorodifluoromethane	ND	1	1,2-dibromoethane	ND	1
chloromethane	ND	1	chlorobenzene	ND	1
vinyl chloride	ND	1	1,1,1,2-tetrachloroethane	ND	1
bromomethane	ND	1	ethylbenzene	ND	1
chloroethane	ND	1	*m, p*-xylene	ND	1
trichlorofluoromethane	ND	1	*o*-xylene	ND	1
1,1-dichloroethene	ND	1	styrene	ND	1
methylene chloride	ND	1	isopropylbenzene	ND	1
trans-1,2-dichloroethene	ND	1	bromoform	ND	1
1,1-dichloroethane	ND	1	1,1,2,2-tetrachloroethane	ND	1
2,2-dichloropropane	ND	1	1,2,3-trichloropropane	ND	1
cis-1,2-dichloroethene	ND	1	n-propylbenzene	ND	1
chloroform	ND	1	bromobenzene	ND	1
bromochloromethane	ND	1	1, 3, 5-trimethylbenzene	ND	1
1,1,1-trichloroethane	ND	1	2-chlorotoluene	ND	1
1,1-dichloropropene	ND	1	4-chlorotoluene	ND	1
carbon tetrachloride	ND	1	tert-butylbenzene	ND	1
1,2-dichloroethane	ND	1	1, 2, 4-trimethylbenzene	ND	1
benzene	ND	1	sec-butylbenzene	ND	1
trichloroethene	ND	1	p-isopropyltoluene	ND	1
1,2-dichloropropane	ND	1	1,3-dichlorobenzene	ND	1
bromodichloromethane	ND	1	1,4-dichlorobenzene	ND	1
dibromomethane	ND	1	n-butylbenzene	ND	1
cis-1,3-dichloropropene	ND	1	1,2-dichlorobenzene	ND	1
toluene	ND	1	1,2-dibromo-3-chloropropane	ND	1
trans-1,3-dichloropropene	ND	1	1, 2, 4-trichlorobenzene	ND	1
1,1,2-trichloroethane	ND	1	hexachlorobutadiene	ND	1
1,3-dichloropropane	ND	1	naphthalene	ND	1
tetrachloroethene	ND	1	1, 2, 3-trichlorobenzene	ND	1
chlorodibromomethane	ND	1	iodmethane	ND	1
acetone	ND	50	methyl ethyl ketone	ND	20
carbon disulfide	ND	1	methyl isobutyl ketone	ND	20
2-chloroethyl vinyl ether	ND	1	1,3,5-trimethylbenzene	ND	1
2-hexanone	ND	20	vinyl acetate	ND	1

Comments:
ND - Not Dectected outside the parameters
NA - Not Applicable
PQL - Practical Quantitation Limit
All results are reported as ug/L.

Surrogate	Recovery	Recovery Acceptance Range
Dibromofluoromethane-SS	96%	50 - 150%
Toluene-d8-SS	94%	50 - 150%
4-Bromofluorobenzene-SS	111%	50 - 150%

Reviewed by: _____

Alpine Analytical, Inc.
1315 Cherry, Helena, MT 59601 (406)449-6282

VOLATILE ORGANIC COMPOUNDS - LONG LIST

Client:	Tetra Tech Inc.	**Date Reported:**	09-Mar-05
Sample ID:	LGP-MW-3		
Project ID:	Lewis Gravel Pit	**Chain of Custody No.:**	4886
Site ID:	15647-01		
Laboratory ID:	12B305	**Date / Time Sampled:**	24-Feb-05 @ 16:15
Sample Matrix:	Water	**Date / Time Received:**	25-Feb-05 @ 09:30
Preservatives:	HCl	**Date Extracted:**	NA
Condition:	Intact	**Date Analyzed:**	02-Mar-05 @ 14:56

Parameter	Analytical Result	PQL	Parameter	Analytical Result	PQL
dichlorodifluoromethane	ND	1	1,2-dibromoethane	ND	1
chloromethane	ND	1	chlorobenzene	ND	1
vinyl chloride	ND	1	1,1,1,2-tetrachloroethane	ND	1
bromomethane	ND	1	ethylbenzene	ND	1
chloroethane	ND	1	*m, p*-xylene	ND	1
trichlorofluoromethane	ND	1	o-xylene	ND	1
1,1-dichloroethene	ND	1	styrene	ND	1
methylene chloride	ND	1	isopropylbenzene	ND	1
trans-1,2-dichloroethene	ND	1	bromoform	ND	1
1,1-dichloroethane	ND	1	1,1,2,2-tetrachloroethane	ND	1
2,2-dichloropropane	ND	1	1,2,3-trichloropropane	ND	1
cis-1,2-dichloroethene	ND	1	n-propylbenzene	ND	1
chloroform	ND	1	bromobenzene	ND	1
bromochloromethane	ND	1	1,3,5-trimethylbenzene	ND	1
1,1,1-trichloroethane	ND	1	2-chlorotoluene	ND	1
1,1-dichloropropene	ND	1	4-chlorotoluene	ND	1
carbon tetrachloride	ND	1	tert-butylbenzene	ND	1
1,2-dichloroethane	ND	1	1, 2, 4-trimethylbenzene	ND	1
benzene	ND	1	sec-butylbenzene	ND	1
trichloroethene	ND	1	p-isopropyltoluene	ND	1
1,2-dichloropropane	ND	1	1,3-dichlorobenzene	ND	1
bromodichloromethane	ND	1	1,4-dichlorobenzene	ND	1
dibromomethane	ND	1	n-butylbenzene	ND	1
cis-1,3-dichloropropene	ND	1	1,2-dichlorobenzene	ND	1
toluene	ND	1	1,2-dibromo-3-chloropropane	ND	1
trans-1,3-dichloropropene	ND	1	1, 2, 4-trichlorobenzene	ND	1
1,1,2-trichloroethane	ND	1	hexachlorobutadiene	ND	1
1,3-dichloropropane	ND	1	naphthalene	ND	1
tetrachloroethene	ND	1	1, 2, 3-trichlorobenzene	ND	1
chlorodibromomethane	ND	1	iodmethane	ND	1
acetone	ND	50	methyl ethyl ketone	ND	20
carbon disulfide	ND	1	methyl isobutyl ketone	ND	20
2-chloroethyl vinyl ether	ND	1	1,3,5-trimethylbenzene	ND	1
2-hexanone	ND	20	vinyl acetate	ND	1

Comments:

ND - Not Dectected outside the parameters
NA - Not Applicable
PQL - Practical Quantitation Limit
All results are reported as ug/L.

Surrogate	Recovery	Recovery Acceptance Range
Dibromofluoromethane-SS	110%	50 - 150%
Toluene-d8-SS	107%	50 - 150%
4-Bromofluorobenzene-SS	110%	50 - 150%

Reviewed by: _____

Alpine Analytical, Inc.
1315 Cherry, Helena, MT 59601 (406)449-6282

VOLATILE ORGANIC COMPOUNDS - LONG LIST

Client:	Tetra Tech Inc.	Date Reported:	09-Mar-05
Sample ID:	LGP-NPSW		
Project ID:	Lewis Gravel Pit	Chain of Custody No.:	4886
Site ID:	15647-01		
Laboratory ID:	12B307	Date / Time Sampled:	24-Feb-05 @ 14:50
Sample Matrix:	Water	Date / Time Received:	25-Feb-05 @ 09:30
Preservatives:	HCl	Date Extracted:	NA
Condition:	Intact	Date Analyzed:	02-Mar-05 @ 15:31

Parameter	Analytical Result	PQL	Parameter	Analytical Result	PQL
dichlorodifluoromethane	ND	1	1,2-dibromoethane	ND	1
chloromethane	ND	1	chlorobenzene	ND	1
vinyl chloride	ND	1	1,1,1,2-tetrachloroethane	ND	1
bromomethane	ND	1	ethylbenzene	ND	1
chloroethane	ND	1	*m, p*-xylene	ND	1
trichlorofluoromethane	ND	1	*o*-xylene	ND	1
1,1-dichloroethene	ND	1	styrene	ND	1
methylene chloride	ND	1	isopropylbenzene	ND	1
trans-1,2-dichloroethene	ND	1	bromoform	ND	1
1,1-dichloroethane	ND	1	1,1,2,2-tetrachloroethane	ND	1
2,2-dichloropropane	ND	1	1,2,3-trichloropropane	ND	1
cis-1,2-dichloroethene	ND	1	n-propylbenzene	ND	1
chloroform	ND	1	bromobenzene	ND	1
bromochloromethane	ND	1	1, 3, 5-trimethylbenzene	ND	1
1,1,1-trichloroethane	ND	1	2-chlorotoluene	ND	1
1,1-dichloropropene	ND	1	4-chlorotoluene	ND	1
carbon tetrachloride	ND	1	tert-butylbenzene	ND	1
1,2-dichloroethane	ND	1	1, 2, 4-trimethylbenzene	ND	1
benzene	ND	1	sec-butylbenzene	ND	1
trichloroethene	ND	1	p-isopropyltoluene	ND	1
1,2-dichloropropane	ND	1	1,3-dichlorobenzene	ND	1
bromodichloromethane	ND	1	1,4-dichlorobenzene	ND	1
dibromomethane	ND	1	n-butylbenzene	ND	1
cis-1,3-dichloropropene	ND	1	1,2-dichlorobenzene	ND	1
toluene	ND	1	1,2-dibromo-3-chloropropane	ND	1
trans-1,3-dichloropropene	ND	1	1, 2, 4-trichlorobenzene	ND	1
1,1,2-trichloroethane	ND	1	hexachlorobutadiene	ND	1
1,3-dichloropropane	ND	1	naphthalene	ND	1
tetrachloroethene	ND	1	1, 2, 3-trichlorobenzene	ND	1
chlorodibromomethane	ND	1	iodmethane	ND	1
acetone	ND	50	methyl ethyl ketone	ND	20
carbon disulfide	ND	1	methyl isobutyl ketone	ND	20
2-chloroethyl vinyl ether	ND	1	1,3,5-trimethylbenzene	ND	1
2-hexanone	ND	20	vinyl acetate	ND	1

Comments:
ND - Not Dectected outside the parameters
NA - Not Applicable
PQL - Practical Quantitation Limit
All results are reported as ug/L.

Surrogate	Recovery	Recovery Acceptance Range
Dibromofluoromethane-SS	95%	50 - 150%
Toluene-d8-SS	102%	50 - 150%
4-Bromofluorobenzene-SS	102%	50 - 150%

Reviewed by: _____

Alpine Analytical, Inc.
1315 Cherry, Helena, MT 59601 (406)449-6282

VOLATILE ORGANIC COMPOUNDS - LONG LIST

Client: **Tetra Tech Inc.**
Sample ID: **LGP-SS01 8-9.5 bgs**
Project ID: Lewis Gravel Pit
Site ID: 15647-01

Date Reported: 09-Mar-05
Chain of Custody No.: 4886

Laboratory ID: 12B306
Sample Matrix: Soil
Preservatives: None
Condition: Intact

Date / Time Sampled: 24-Feb-05 @ 11:10
Date / Time Received: 25-Feb-05 @ 09:30
Date Extracted: 02-Mar-05 @ 14:00
Date Analyzed: 02-Mar-05 @ 16:17

Parameter	Analytical Result	PQL	Parameter	Analytical Result	PQL
dichlorodifluoromethane	ND	0.20	1,2-dibromoethane	ND	0.20
chloromethane	ND	0.20	chlorobenzene	ND	0.20
vinyl chloride	ND	0.20	1,1,1,2-tetrachloroethane	ND	0.20
bromomethane	ND	0.20	ethylbenzene	ND	0.20
chloroethane	ND	0.20	*m, p*-xylene	ND	0.20
trichlorofluoromethane	ND	0.20	*o*-xylene	ND	0.20
1,1-dichloroethene	ND	0.20	styrene	ND	0.20
methylene chloride	ND	0.20	isopropylbenzene	ND	0.20
trans-1,2-dichloroethene	ND	0.20	bromoform	ND	0.20
1,1-dichloroethane	ND	0.20	1,1,2,2-tetrachloroethane	ND	0.20
2,2-dichloropropane	ND	0.20	1,2,3-trichloropropane	ND	0.20
cis-1,2-dichloroethene	ND	0.20	n-propylbenzene	ND	0.20
chloroform	ND	0.20	bromobenzene	ND	0.20
bromochloromethane	ND	0.20	1, 3, 5-trimethylbenzene	ND	0.20
1,1,1-trichloroethane	ND	0.20	2-chlorotoluene	ND	0.20
1,1-dichloropropene	ND	0.20	4-chlorotoluene	ND	0.20
carbon tetrachloride	ND	0.20	tert-butylbenzene	ND	0.20
1,2-dichloroethane	ND	0.20	1, 2, 4-trimethylbenzene	ND	0.20
benzene	ND	0.20	sec-butylbenzene	ND	0.20
trichloroethene	ND	0.20	p-isopropyltoluene	ND	0.20
1,2-dichloropropane	ND	0.20	1,3-dichlorobenzene	ND	0.20
bromodichloromethane	ND	0.20	1,4-dichlorobenzene	ND	0.20
dibromomethane	ND	0.20	n-butylbenzene	ND	0.20
cis-1,3-dichloropropene	ND	0.20	1,2-dichlorobenzene	ND	0.20
toluene	ND	0.20	1,2-dibromo-3-chloropropane	ND	0.20
trans-1,3-dichloropropene	ND	0.20	1, 2, 4-trichlorobenzene	ND	0.20
1,1,2-trichloroethane	ND	0.20	hexachlorobutadiene	ND	0.20
1,3-dichloropropane	ND	0.20	naphthalene	ND	0.20
tetrachloroethene	ND	0.20	1, 2, 3-trichlorobenzene	ND	0.20
chlorodibromomethane	ND	0.20	iodmethane	ND	0.2
acetone	ND	10	methyl ethyl ketone	ND	4.0
carbon disulfide	ND	0.20	methyl isobutyl ketone	ND	4.0
2-chloroethyl vinyl ether	ND	0.20	1,3,5-trimethylbenzene	ND	0.20
2-hexanone	ND	4.0	vinyl acetate	ND	0.20

Comments: ND - Not Dectected outside the parameters
PQL - Practical Quantitation Limit
All results are reported in ug/g.

Surrogate	Recovery	Recovery Acceptance Range
Dibromofluoromethane-SS	100%	50 - 150%
Toluene-d8-SS	97%	50 - 150%
4-Bromofluorobenzene-SS	106%	50 - 150%

Reviewed by:

Alpine Analytical, Inc.
1315 Cherry, Helena, MT 59601 (406)449-6282

QUALITY CONTROL DATA - VOC

Date Reported: 09-Mar-05

Laboratory ID: LCVOC10 **Date Extracted:** NA
Sample Matrix: Water **Date Analyzed:** 02-Mar-05

Parameter[3]	Blank Analytical Result	True Value	LC Analytical Result	LC Duplicate Result	Recovery[1]	Recovery Acceptance Range	Relative Difference[2]	Difference Acceptance Range
1,1-Dichloroethene	<1.0	25	26	25	104%	50 - 150%	4%	-25 to +25%
Benzene	<1.0	25	20	19	80%	50 - 150%	5%	-25 to +25%
Toluene	<1.0	25	23	23	92%	50 - 150%	0%	-25 to +25%
Chlorobenzene	<1.0	25	23	25	92%	50 - 150%	9%	-25 to +25%
Trichloroethene	<1.0	25	23	22	92%	50 - 150%	4%	-25 to +25%

Surrogate	Blank Recovery	Analytical Recovery	Duplicate Recovery	Recovery Acceptance Range
Dibromofluoromethane-SS	93%	73%	94%	50 - 150%
Toluene-d8-SS	100%	100%	97%	50 - 150%
4-Bromofluorobenzene-SS	108%	111%	114%	50 - 150%

Footnotes: [1] - The Recovery percent is based upon the recovery of the Analytical Result from the True Value.
[2] - The Relative Difference percent is the difference resulting from the Analytical Recovery and the Duplicate Recovery.
[3] - All other parameters of the 8260 are not dectected in our Quality Control Data.

References: **METHOD 8260A**-Volatile Organic Compounds by GC/MS, SW846, USEPA, 1995.

Comments: All results are reported as ug/L.
Continuing calibration verification passed.

Reviewed by: _____

Alpine Analytical, Inc.
1315 Cherry, Helena, MT 59601 (406)449-6282

QUALITY CONTROL DATA - VOC

Date Reported: 09-Mar-05

Laboratory ID: LCVOC12 Date Extracted: 02-Mar-05
Sample Matrix: Soil Date Analyzed: 02-Mar-05

Parameter[3]	Blank Analytical Result	True Value	LC Analytical Result	LC Duplicate Result	Recovery[1]	Recovery Acceptance Range	Relative Difference[2]	Difference Acceptance Range
Benzene	<0.20	12.5	9.5	9.5	76%	50 - 150%	0%	-25 to +25%
Chlorobenzene	<0.20	12.5	14.0	16.0	112%	50 - 150%	14%	-25 to +25%
1,1-Dichloroethene	<0.20	12.5	12.5	11.0	100%	50 - 150%	12%	-25 to +25%
Toluene	<0.20	12.5	13.0	14.5	104%	50 - 150%	12%	-25 to +25%
Trichloroethene	<0.20	12.5	11.5	13.0	92%	50 - 150%	13%	-25 to +25%

Surrogate	Blank Recovery	Analytical Recovery	Duplicate Recovery	Recovery Acceptance Range
Dibromofluoromethane-SS	97%	80%	70%	50 - 150%
Toluene-d8-SS	124%	93%	90%	50 - 150%
4-Bromofluorobenzene-SS	93%	108%	113%	50 - 150%

Footnotes: [1] - The Recovery percent is based upon the recovery of the Analytical Result from the True Value.
[2] - The Relative Difference percent is the difference resulting from the Analytical Recovery and the Duplicate Recovery.
[3] - All other parameters of the 8260 are not dectected in our Quality Control Data.

References: **METHOD 8260A**-Volatile Organic Compounds by GC/MS, SW846, USEPA, 1995.

Comments: All results are reported as ug/g.
Continuing calibration verification passed.

Reviewed by: _____

Alpine Analytical, Inc.

1315 Cherry Ave. Helena, MT 59601
(406) 449-6282 (800) 814-6282

Chain of Custody

Nº 4886

Client	Project ID	Analysis Requested		
Tetra Tech Inc	Lewis Gravel Pit	8260 long list		
Sampler (Print)	Site ID			
Earl F Griffith	15647-01			
Sampler (Signature)				
Earl F Griffith				

Report to: TT Inc
Address: 2969 Airport Rd.
City State Zip
Phone Fax

Sample Identification	Sample Date	Sample Time	Type Grab	Type Comp	Matrix	Number of Containers	Comments	LAB ID
LGP-MW-1	24 Feb05	1430	X			2	MEK is parameter of interest	1ZB303
LGP-MW2		1543	X			2		1ZB304
LGP-MW3		1615	X			2		1ZB305
LGP-SS01 8-9.5 bgs		1110	X			1		1ZB306
LGP-NPSW		1450	X			2		1ZB307

Relinquished by	Date/Time	Received by	Relinquished by	Date/Time	Received by
Earl F Griffith	25 Feb05 0856				
Relinquished by	Date/Time	Received by Laboratory	Remarks:	Shipped: Mail ☐ Fed Ex ☐ UPS ☐ Hand Delivered ☑ Bus ☐	
	2/25/05 0930	Theresa Hossfeld			

** An additional cost may be incurred for samples disposed of by Alpine Analytical, Inc. .